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DEPARTMENT OF NATURAL RESOURCES

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Mr. Thomas Lennox, City Manager City of Corunna 402 North Shiawassee Street Corunna, Michigan 48817

Dear Mr. Lennox:

In a letter to you dated July 24, 1974, Mr. Ralph, Purdy, Deputy Director, Environmental Protection Branch, stated that we would conduct an inspection of the Corunna Mill Pond Dam located on the Shiawassee River in the City of Corunna. On August 19, 1974, such an inspection was conducted.

Our inspection revealed that the following physical conditions presently exist:

- 1. The dam consists of approximately an 8 foot head concrete overflow structure that spans the entire length of the river. The dam and impoundment flooding are contained entirely within the natural river banks. The surface of the concrete has suffered from spalling as evidenced by chunks of concrete lying below the dam.
- 2. The old mill located on the left bank has had its superstructure removed and all that remains is these two stoplog control bays that were used to control the flow of the water through the mill. This stoplog control appears to be functional and could be used to dewater the impoundment, if necessary.
- 3. There appeared to be no development in the flood plain in the immediately downstream area of the dam that would be affected by a failure of the dam.

Due to the massiveness of this dam, it is highly unlikely that a complete failure would occur at one time. It might be possible for the dam to deteriorate to the point that, in time, a portion may fail. However, the impoundment has little storage capacity due to its smallness and sediment accumulation. Also, during flood flow conditions the dam would become at least partially submerged which would reduce its effective head. Therefore, under flood flow conditions, a failure of the dam is not likely to significantly increase downstream flood stages and thereby be the direct cause of any downstream property damage. In the event of failure, downstream movement of sediment from the impoundment would occur.

Mr. Lennox , -2- August 26, 1974

Although this dam cannot be considered to be in good repair, we do not

consider its condition to be hazardous. We therefore do not consider it justifiable to require the owner to engage a registered professional engineer and submit to us a report on the dam's condition, as per our authority under Section 2(c) of Act 184, Public Acts of 1963, as amended, Should the dam not be maintained or repaired, it will eventually be reduced to a pile of rubble. It appeared to us that property located on the backwater of the dam are more subject to flooding than downstream properties.

Thank you for bringing this matter to our attention, and if you should have any further questions, please feel free to contact us.

Very truly yours,

BUREAU OF WATER MANAGEMENT Hydrological Survey Division

Leon A. Cook, P.E., Chief Hydrologic Engineering Section

LAC: dp

cc: D. Granger

R. Purdy